



Uncertainties in HexSim Parameterization

5 messages



Tue, May 11, 2010 at 12:21 PM

Hi Bruce,

Here's the list I compiled from our WebX conversation yesterday. I think the items under the Vital Rates heading should all be run by Bob Anthony. I'm not sure which other items we should send his way...

Nat.han

Movement Events

- Explored area may be too large. It should be set equal to the home range size.
- Should we use multiple dispersal / exploration pairs (with smaller path length and explored areas)?
- Do we have the stopping criteria set correctly?

Range Parameters

- ullet Range area should correspond to max territory size.
- What is minimum range-eligible hexagon score?
- Should we use a minimum range resource value?
- Is floater preemption set correctly?
- What resource targets should we use?

Range Size Stratification

- Should we impose range size stratification by modifying the habitat map?
- What resource target should we use?
- Can we correct for large home range artifacts appearing in the south?
- What are the home range sizes that we observe in the various zones?

Vital Rates

- Should we be setting resource class based upon explored or allocated areas?
- Is the survival event in the correct event sequence location?
- Make sure Bob Anthony's reproduction rates are strictly for nesting birds.
- Should birds not nesting be tracked separately from birds with a clutch size of zero?

--

Nathan Schumaker

(541) 754-4658

Bruce G. Marcot <brucem@spiritone.com>

Tue, May 11, 2010 at 12:29 PM

To: Nathan Schumaker <

Cc: Brendan White <Brendan_White@fws.gov>

Nathan, thanks much, great job summarizing our meeting yesterday.

Here's my take ... see below ... codes are:

BA = discuss with Bob Anthony

DP = decision (on parameter value) pending getting info from Brendan (on home range sizes) or Eric (on vital rates...?)

MA = decision pending getting MaxEnt files and (as a potential procedure) overlaying known NSO sites onto the HexMap generated from the MaxEnt files

Nathan & Brendan, pls take a quick look below at my coding for each item. If you concur, we can proceed with contacting Bob, and for other items await the pending info summaries and MaxEnt output. For the latter, we may then need to further confer with the folks doing the MaxEnt work (Jeff D, Brian W?).

- bruce

On 5/11/2010 12:21 PM, Nathan Schumaker wrote:

Hi Bruce,

Here's the list I compiled from our WebX conversation yesterday. I think the items under the Vital Rates heading should all be run by Bob Anthony. I'm not sure which other items we should send his way...

Nathan

Movement Events

- ullet Explored area may be too large. It should be set equal to the home range size. [DP]
- Should we use multiple dispersal / exploration pairs (with smaller path length and explored areas)? [BA]
- \bullet Do we have the stopping criteria set correctly? [BA]

Range Parameters

- Range area should correspond to max territory size. [DP]
- What is minimum range-eligible hexagon score? [MA]
- Should we use a minimum range resource value? [MA]
- Is floater preemption set correctly? [BA]
- What resource targets should we use? [MA]

Range Size Stratification

- Should we impose range size stratification by modifying the habitat map? [BA? Run by MAG overall?]
- What resource target should we use? [MA]
- Can we correct for large home range artifacts appearing in the south? [Run by MAG?]
- What are the home range sizes that we observe in the various zones? [DP]

Vital Rates

- Should we be setting resource class based upon explored or allocated areas? [BA]
- Is the survival event in the correct event sequence location? [BA]
- ullet Make sure Bob Anthony's reproduction rates are strictly for nesting birds. [BA]
- Should birds not nesting be tracked separately from birds with a clutch size of zero? [BA]

Nathan Schumaker

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Bruce G. Marcot, Ph.D. Research Wildlife Ecologist
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Ecology Picture of the Week:
http://www.taos-telecommunity.org/epow/
The Plexus -- Where Disciplines Collide:
http://www.spiritone.com/~brucem

** personal correspondence **

Nathan Schumaker <

Tue, May 11, 2010 at 1:30 PM

Hi Bruce, Brendan,

Bruce, I like your coding. The only comments I have are that

- 1. Stratifying range size via habitat should probably be run by the MAG (as you suggest).
- 2. There are going to be some issues that can only be resolved after initial HexSim runs have been conducted. The item "can we correct for large home range artifacts..." is one of those. I would not suggest running this by the MAG until we've looked at simulation output to make sure there's an issue that needs a solution.

Thanks,

Nathan

[Quoted text hidden]

Bruce G. Marcot <brucem@spiritone.com>

Tue, May 11, 2010 at 3:27 PM

To: Nathan Schumaker <

Cc: Brendan White <Brendan_White@fws.gov>

Very good, Nathan, I'll concur with your points here. (No need to unnecessarily bug the entire MAG on point $2\dots$ especially when we can bug Brendan first, ha! :-P).

- bruce

[Quoted text hidden]

Brendan_White@fws.gov <Brendan_White@fws.gov>

Wed, May 12, 2010 at 1:03 PM

To: "Bruce G. Marcot" <brucem@spiritone.com>

Cc: Nathan Schumaker <

My email says I've already commented on this, but I can't find it and, so, am not sure what I said.

I like you're coding below......am working on my task(s). Thanks.

Brendan White

Brendan White@fws.gov

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